

REMARKS

Applicants' attorney thanks the Examiner for her comments. Independent Claim 1 has been amended to include the limitations of former Claims 2 and 3, to recite percentage ranges for the three components and indicate that the copolymer is a graft copolymer of the high and low performance elastomers. Independent Claims 13, 25 and 31 already recite these limitations and have not been amended. Former Claims 2 and 3 have been cancelled.

Notably, Applicants' specification provides explicit definitions for the terms "high performance elastomer," "low performance elastomer" and "graft copolymer" recited in each of the independent claims (p. 4, lines 7-23). Under the law, a patent applicant is permitted to serve as his or her own lexicographer. Thus, when claim terms are given clear meanings in the specification, they should not be presumed to have any other meaning when evaluating the claims for patentability.

a) Claim Rejection Based On Guntherberg et al.

The rejection of Claims 1-3, 6, 11, 13, 16, 17 and 31 under 35 U.S.C. §102(b) as anticipated by U.S. Patent 6,579,937 ("Guntherberg et al.") is respectfully traversed.

The Guntherberg et al. patent has a publication date of 17 June 2003, which is less than one year before the filing date of the instant application. Accordingly, the Guntherberg et al. patent is not available as prior art under 35 U.S.C. §102(b). Applicants presume that the Examiner is instead relying on the prior PCT Publication WO 00/36010 as a reference under 35 U.S.C. §102(b).

Guntherberg et al. discloses a thermoplastic molding composition including as mandatory components, (A) 5-98% by weight of an elastomeric graft copolymer, (B) 1-90% by weight of a further copolymer, and (C) 1-70% by weight of an elastomeric block copolymer composed of at least one block hard phase containing copolymerized vinylaromatic monomer units and at least one elastomeric block soft phase having copolymerized units of a vinylaromatic monomer and a diene (Abstract).

The elastomeric graft copolymer (A) is described as including 30-90% by weight of a graft base (a_1) and 10-70% by weight of a graft (a_2) grafted onto the base (a_1) (Col. 1, line 48 – Col. 2, line 22). The further copolymer (B) is described as being

identical or very similar to the graft (a_2) (Col. 2, lines 23-29). Therefore, the copolymer (B) could very easily be the same as the graft (a_2) component of the elastomeric graft copolymer (A).

Therefore, in order for the graft copolymer (A) to be a copolymer of the further copolymer (B) and the elastomeric block copolymer (C) as required by Applicants' claims, there would need to be some overlap between the polymers disclosed for the graft base (a_1) and the elastomeric block copolymer (C). A careful inspection of Guntherberg et al. reveals that there is no overlap. Therefore, the reference cannot possibly read on Applicants' claims.

The elastomeric block copolymer (C) is described as including at least one hard phase block having copolymerized units of a vinylaromatic monomer and at least one soft phase block including copolymerized units of both a vinylaromatic monomer and a diene. The hard phase must constitute 1-40% by volume of the block copolymer (C) and the diene must constitute less than 50% by weight of the block copolymer (C) (Col. 2, lines 30-49).

The graft base (a_1) can include a partially crosslinked acrylate polymer (a_{11}) and/or a diene polymer (a_{12}). (Col. 1, line 49 – Col. 2, line 10). The acrylate polymer (a_{11}) cannot be the same as the block copolymer (C) because the disclosed block copolymer (C) does not include an alkyl acrylate combined with a polyfunctional crosslinking monomer as required for (a_{11}). The diene polymer (a_{12}) cannot be the same as the block copolymer (C) because the diene polymer (a_{12}) must contain 60-100% by weight of a diene, whereas the block copolymer (C) must contain less than 50% by weight of a diene.

For at least these reasons, the graft copolymer (A) disclosed in Guntherberg et al. cannot possibly be a copolymer of the disclosed polymer (B) and the disclosed polymer (C).

In the Office Action, the Examiner attempts to equate the disclosed polymer (C) with Applicants' graft copolymer. However, the disclosed polymer (C) is plainly not a graft copolymer. Where Guntherberg et al. intends to disclose a graft copolymer (e.g., with reference to polymer (A)), that language is used to describe the polymer. There is no reference to polymer (C) as being a graft copolymer. Furthermore,

it is clear that polymer (C), as described, is not a copolymer of (A) and (B). For instance, polymer (C) does not contain any of the polar units (a_{22}) that are required for both polymers (A) and (B).

Accordingly, none of Applicants' claims is anticipated. This rejection should be withdrawn.

b) Claim Rejection Based On Modic et al.

The rejection of Claims 1-2, 6 and 8 under 35 U.S.C. §102(b) as anticipated by U.S. Patent 5,461,111 ("Modic et al.") is respectfully traversed.

Modic et al. discloses a rigid thermoplastic composition comprising about 60-95% by weight of a graft copolymer and 5-40% by weight of a rubber component (Col. 1, line 64 – Col. 2, line 11). Modic et al. does not disclose an elastomeric composition including a high performance elastomer, a low performance elastomer and about 0.1-10% by weight of a graft copolymer of the high and low performance elastomers, as required by Applicants' claims.

Furthermore, the Examiner erroneously equates the term "blend" in the prior art with "copolymer" in Applicants' claims. A blend is not a copolymer. A copolymer is not a blend.

Accordingly, no claim is anticipated. This rejection should be withdrawn.

c) Claim Rejection Based On Sipinen

The rejection of Claims 1-3, 6, 13, 25, 29, 31 and 34-35 under 35 U.S.C. §102(b) as anticipated by U.S. Patent 4,808,474 ("Sipinen") is respectfully traversed. Sipinen discloses a pressure sensitive adhesive tape having a backing that includes a blend of isotactic polypropylene and a flexible polymer (Col. 1, lines 61-66). The crystalline isotactic polypropylene is present in a major amount, and the flexible polymer is present in a minor amount (Col. 2, lines 20-24). The flexible polymer may be an ethylene-based polymer or an elastomer, such as a styrene block copolymer elastomer (Col. 2, lines 25-29), or an ethylene-propylene-diene terpolymer (Col. 3, lines 33-39).

Because the crystalline polypropylene is the major component, the composition of Sipinen is probably not elastomeric. Sipinen also does not disclose a blend of a high performance elastomer with a low performance elastomer. According to Sipinen, only one flexible polymer is needed. Sipinen also does not disclose a graft

copolymer of a high performance elastomer and a low performance elastomer. Please refer to the definition of "graft copolymer" on page 4, lines 13-23 of Applicants' specification. This is the only applicable definition of the term for examination purposes.

Again, the Examiner erroneously equates a polymer blend with a graft copolymer. A polymer blend is not a graft copolymer. A graft copolymer is not a blend.

Accordingly, no claim is anticipated. This rejection should be withdrawn.

d) Claim Rejection Based On Sipinen In View Of Pradel

The rejection of Claims 4-5, 7-12, 14-24, 26-30 and 32-33 under 35 U.S.C. §103(a) as obvious over Sipinen in view of U.S. Patent 6,750,288 ("Pradel") is respectfully traversed. These claims depend from Claim 1, 25 or 31 and are patentable over Sipinen for at least the same reasons, explained above. Pradel does not fill the voids in the Sipinen disclosure. Pradel discloses a single-site catalyzed isotactic polypropylene grafted with a functionalized monomer (Col. 1, lines 4-10). This has nothing to do with Applicants' claimed invention.

Accordingly, no claim is rendered obvious. This rejection should be withdrawn.

e) Conclusion

Applicants believe that the claims, as now presented, are in condition for allowance. If the Examiner detects any unresolved issues, then Applicants' attorney respectfully requests a telephone call from the Examiner, and a telephone interview.

Respectfully submitted,



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